



Australian Government



Native Fish Strategy

FISH FACTSHEET: CARP GUDGEONS



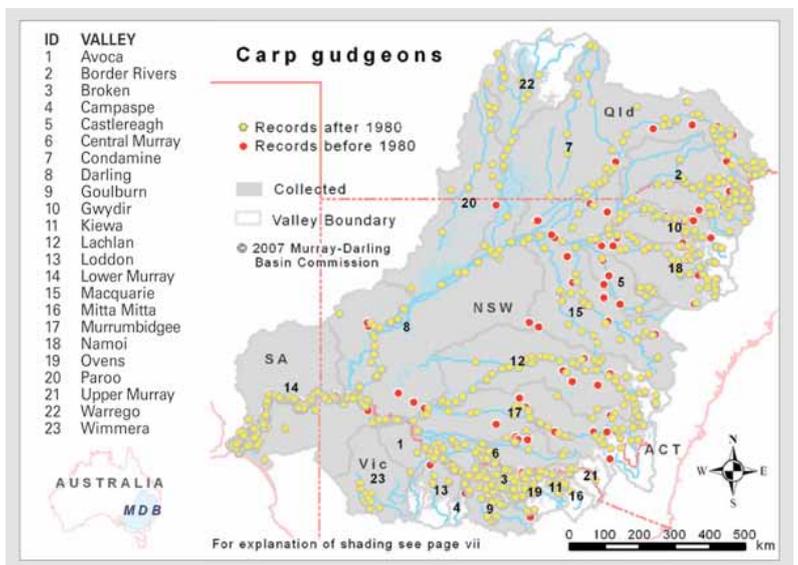
Scientific Name

Hypseleotris spp

photo by Gunther Schmida

DISTRIBUTION AND ABUNDANCE

As a group, carp gudgeons are widespread and common at mid to lower altitudes in the central and southern Basin, and up to 1000m elevation in the northern Basin. They are also found in coastal streams from central NSW to central Qld. The relative abundance of the various forms differs across the Basin. The Western carp gudgeon is now apparently rare in SA, but abundant and the only form found in the upper Murrumbidgee . However, they are not found in the Murrumbidgee River upstream of the ACT and in cold headwater streams generally. During the NSW Rivers Survey, carp gudgeons were the most and third most abundant native species recorded in the Darling and Murray catchments, respectively.



IDENTIFICATION

There is considerable confusion over the identification of 'carp gudgeons' in south-eastern Australia. Recent genetic studies have shown that at least four taxa are present, as well as a range of hybrids. In this book, carp gudgeons are treated as a group. All carp gudgeons are small and laterally compressed, with a truncate to slightly rounded tail. Maximum length 70mm; usually around 40mm. They have two separate and distinct dorsal fins. The upper portion of their dorsal fins often develops and orange-red colour, bordered by a bluish-white stripe, which is particularly noticeable in breeding males. The back is yellowish-grey to greenish-brown and the scales of the upper sides and back have darker edges, giving a slightly reticulated appearance. The bluntness of the head profile, subtle colour variations, and presence of scales on the head and belly vary between the taxa.

BIOLOGY AND HABITAT

This group of species is found in slow-flowing or still waters, normally associated with macrophyte beds or other aquatic vegetation. Two to four species of carp gudgeon often occur sympatrically. Early studies of reproduction in an unknown species of carp gudgeons recorded that spawning occurred when water temperature exceeded 22.5°C. Females may lay up to 2,000 small, (0.5mm diameter), adhesive eggs. Spawning occurs in shallow water and the eggs are deposited on submerged aquatic vegetation or twigs. The male guards and fans the eggs. Hatching occurs after about 50 hours, and newly hatched larvae are 1.8-2.1mm long.

The Western carp gudgeon is the only form present in Lake Burley Griffin in the ACT and is primarily a mid-water carnivore although some benthic feeding also occurs. At this site important dietary items include copepods, aquatic insects, cladocerans and ostracods, and chironomids are the most frequently consumed aquatic insect. Western carp gudgeon is abundant in the Canberra region, in the urban lakes and Googong Reservoir, where it can form a substantial portion of the diet of Golden perch, Redfin perch and Brown trout.

Originally thought to be a relatively sedentary species, recent investigations have demonstrated that large numbers of carp gudgeons attempt to move through fishways on

the Murrumbidgee and Murray rivers. Whether these attempted movements reflect local dispersal or foraging movements is unknown.

POTENTIAL THREATS

The group is widespread and abundant. However, in the ACT, significant kills of Western carp gudgeon have occurred as a result of infestation with the introduced tapeworm *Bothriocephalus acheilognathi*.

GENERAL REFERENCES

- Balcombe & Closs 2000, 2004;
- Baumgartner 2003;
- Bertozzi et al. 2000;
- Dove 1998;
- Dove et al. 1997;
- Larson & Hoese 1996a;
- MDBC 2004b;
- Stoffels & Humphries 2003;
- Thacker & Unmack 2005;
- Unmack 2000.

PDF LINKS

Fishes of the Murray-Darling Basin: An introductory Guide;

<http://mdba.gov.au/files/publications/MDBA-Fish-species-book.pdf>

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Murray-Darling Basin Authority

GPO Box 1801 Canberra ACT 2601

Tel 02 6279 0100 Fax 02 6248 8053

www.mdba.gov.au

